CONTENTS

Ⅰ. Safety Instruction

Safety Warnings & precautions 4
Grounding Instruction 4
Installation precautions 5
Precautions before use 7
Cautions during use 8
Management & Maintenance precautions 9

Ⅱ. Basic Information

Product Features 10
Name of Each Part 12
Display Console 13
Name & Function of each control key 14

Ⅲ. How to use

Operating procedure 15
Quick Start 16
Preprogrammed workout patterns 18
Preprogrammed Mode 19
Custom Program 20
HRC(Heart Rate Control) Mode 21
Manual or Goal Mode 25
Usage Digest 30
Pause Mode 30
Manager Mode 31
How to use TV media (M990TL, M995TL) 32
How to use MP3 player 32

Ⅳ. Management of the product

Level Adjustment 33
Striding belt alignment 34
Instruction for the use of lubricating oil 35
How to inject lubricant manually 35
How to Manage Automatic Lubrication System (M990T, M990TL) 35
Belt Tension Adjustment 36

Ⅴ. Appendix

Specification 38
About Customer Service 39

Ⅰ. Safety Instruction

Safety Warnings & precautions

Please make sure to keep these regulations for user´s safety.

Warning	If this indication is neglected and mistakenly used, the user may incur serious injuries.
Caution	If this indication is neglected and mistakenly used, the user may incur property damages or physical injuries.

※ Other safety symbols.

NO CONTACT

GROUNDING

CHECK

Grounding Instruction

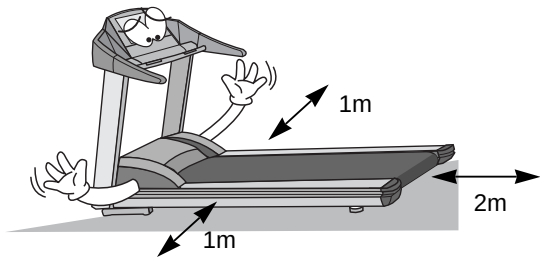
The treadmill must be properly grounded. Grounding will protect you against the danger of electric shock in case of malfunction or short circuit. The treadmill is equipped with a power cord, which has grounding conductor and a grounding plug. The plug must be inserted into an appropriate outlet that is properly installed and grounded in accordance with all local codes and ordinances. If you don't follow these grounding instructions, you could void the warranty or suffer severe injuries.

A risk of electric shock may result from improper connection of equipment-grounding conductor. Check with a qualified electrician if in doubt about proper grounding technique. Do not modify the plug provided with the product. Any modification to the electrical plug will result in a voided warranty. M990T series was produced for AC 200V, 50/60Hz. More than 15A must be needed. Electronic consumption can be various according to the lubrication and user's condition.

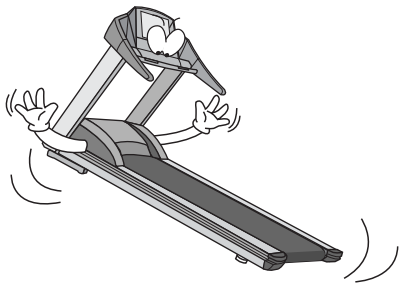
Installation precautions

Caution

Place the treadmill on a firm and even floor. Keep the space 1 to 2 meters surrounding the treadmill.

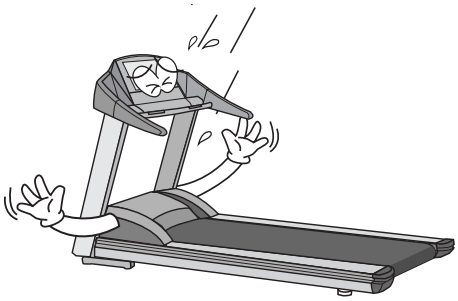


Keep the machine horizontally. If not, this can be cause of vibration and noise.



Install the treadmill where ventilation is good.

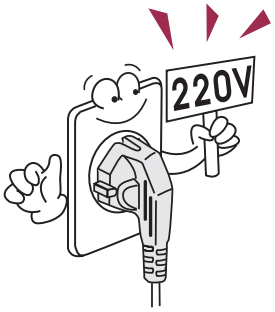
Do not use the treadmill outdoors or in humid or dusty environments. Under too humid or dusty condition, there can be malfunction.



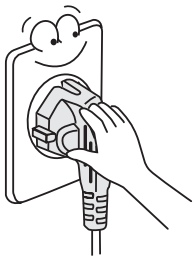
- When you move the product, do not collide the product with the wall or drop it on the floor.
- The lubricant used in the treadmill shall use only the lubricant designated or provided by Motus.
- If you use the general industrial lubricant or the one provided by other companies, the deck and running belt may be damaged.
- After the installation, absolutely do not make unauthorized alteration.
  Make sure to use the power cord that Motus provides.

Warning

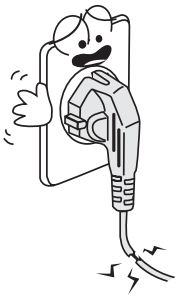
Check power source before use whether the treadmill is proper for 120V AC or 230V AC.



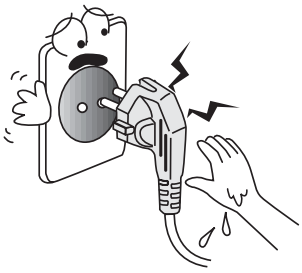
Place the plug completely into the outlet.
Bad connection with power source may cause an explosion or a fire.



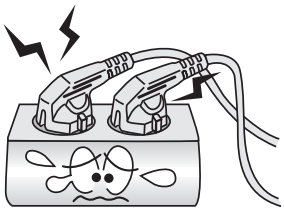
Do not use a warn-out plug or damaged outlet.
This can result in a risk of electric shock or fire.



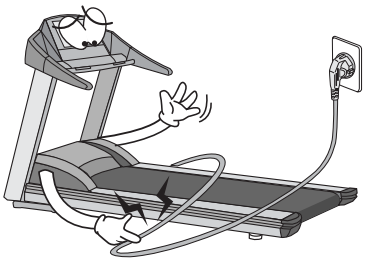
Do not hold the plug with a wet hand.
This can result in a risk of electric shock.



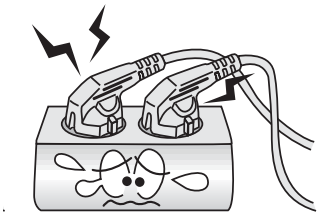
Do not connect several plugs into one outlet. (Use the outlet with ground pin)
The overheat of outlet can cause fire.



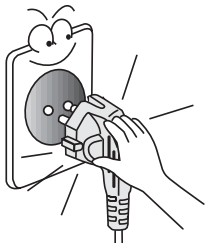
Make sure the cable is not crushed under the machine or other heavy objects.
This can be the cause of electric shock, disconnection or fire.



Do not use extension cord.
Long cord can cause malfunction or stop of treadmill due to voltage drop.



Do not place the machine near a heating device.



Grip head of the plug when you unplug it. Cable can be disconnected if you pull cable itself when unplug it.

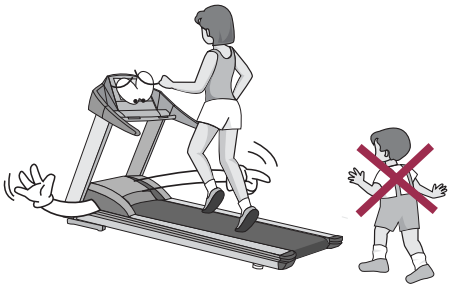
Precautions before use

- You must begin the exercise after consulting with your physician prior to beginning the exercise.
- Do not exercise if you are sick or patient. This can cause an accident.
- Make sure the emergency stop lanyard is tied to you and emergency push button switch is unlocked on the right position before beginning the exercise.
- The connection line with CD, MP3, and headphone shall be linked prior to beginning the exercise. If the connection is made during the exercise, it may cause an accident.
- Make sure to check the conditions of the treadmill before beginning the exercise. If the treadmill is not properly in operation, do not use it.
- Wear proper exercise cloth and shoes. Tie long hair back before exercise.
- The loose outfit or towel shall be away from the running belt not to become caught in the belt or roller. In the event that an object is caught, the treadmill makes the sudden stop which causes an accident.
- Do not operate the treadmill when someone is standing on the treadmill.
- Take care when getting on and off the treadmill. Use the handlebars whenever possible. Place your feet on the right and left side platforms before the running belt begins moving. Step onto the running belt when the speed in at or below 1.0 km/h.
- Never step off the treadmill while the running belt is moving.

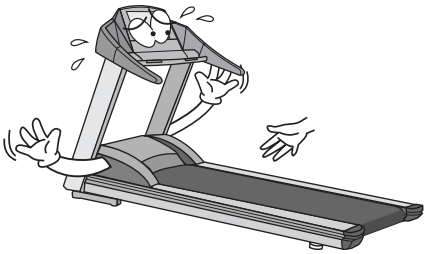
Cautions during use

Warning

Do not push buttons with sharp object or pin etc.
This can cause electric shock.



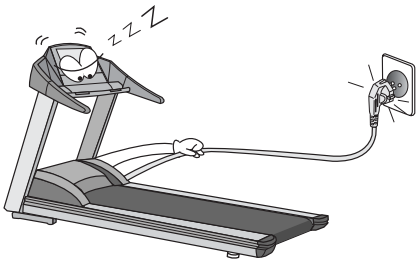
During operation, do not touch any moving parts or rotating parts with one's hand or any other object.
This can lead to severe injury to your body or damage on the product.



Do not allow children, individuals or disabled persons on or near the treadmill.
Do not leave children unsupervised around the treadmill.

Caution

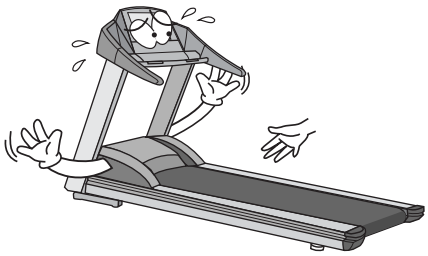
Always unplug the treadmill from the outlet when it is not used, before cleaning or attempting any maintenance tasks.



Attach Emergency lanyard to waist level prior to beginning exercise.

Please put safety guide on where to be easily seen by user.

Do not put any object inside between side platform and running belt.



- If you feel pain, dizziness, shortness of breath or abnormal symptoms during the exercise, Stop the exercise immediately and consult with a physician.
- Please refrain from unnecessary action during the exercise. Unnecessary actions like mobile phone conversation, talking with other the person, taking beverage and etc. can cause unexpected accident.
- Do not use the treadmill in bare feet. Always wear shoes with rubber or high traction soles.
- Do not allow more than one person to exercise on the treadmill. It may cause an accident.
- The user manual indicates the maximum user weight of the product. Do not allow any persons with more than the maximum user weight to use the product.
- Make sure to use handle when mounting or dismounting the treadmill.
- Absolutely do not walk or jog backwards on the treadmill. While the treadmill is in operation, do not try to turn around on the treadmill.
- Do not use the product for the purpose of animal exercise.
- Do not use the damaged running belt or deck. Use of the damaged running belt or deck could cause high risk of accident.
- Make sure to exercise right in the middle of the running belt of the treadmill.
- Exercise only at the speed and incline appropriate for your own physical strength. If you exercise at a speed and incline faster than your capability, you may be under the risk of an injury.
- Do not insert hand or any object in between the side platforms and the running belt.
- Use your own safety guide including additional warning or cautions if necessary.
- Treadmill is hard metal product, so make sure to be careful always when you use treadmill.

Management & Maintenance precautions

- Always unplug when not using the treadmill for a long period of time.
- Do not attach accessories that are not recommended by Motus. It can cause an accident.
- If the product is wet, stop using it and contact your dealer.
- Intermittent and improper lubrication by manual operation not only reduces the expected life span of product, but also might be the cause of the accident. Make sure to completely lubricate periodically. (M995T, M995TL)
- The above mentions, warnings & precautions for safety is very important to prevent unexpected accidents and to protect products. Please keep in mind and follow directions.

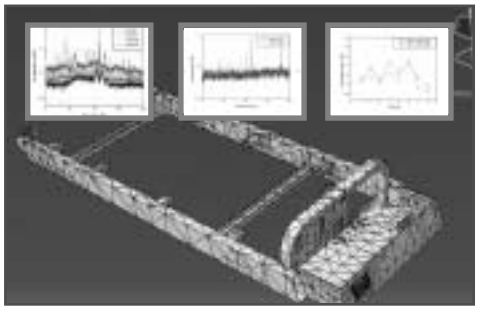
II. Basic Information

Product Features

M990T series treadmill is distinct product line from Motus in its unique design and reliable functions as advanced commercial treadmill.

Low Noise and Vibration

Through long-time manufacturing experience and know-how, up-to-date structure analysis and repeated tests, low noise is achieved and vibration is minimized in wide speed range from low speed to high speed. Higher torque in the low speed range results in a little speed variation, which is based on powerful motor and precise motor control.



Ergonomics Design

Console screen, handlebars and side platforms are ergonomically designed based on body line, running stances and running habits or viewing angle. Various exercise information can be easily read through the display and touch sensitive keys make the user operate it conveniently while exercising.

Exercise Program

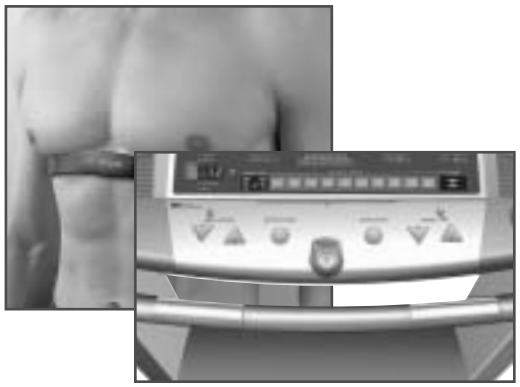
Built-in exercise programs, which are based on scientific analysis, allow user to enjoy various exercises, and custom programs allow user to edit exercise program appropriate for themselves. Also user can enjoy goal-oriented exercise programs based on distance, calories and time.

Auto Lubrication System

Manual lubrication is very troublesome and hard. By replacing it with auto lubrication, it will be very helpful to gym manager, especially to extend product's span of life. (M990TL, M990T)

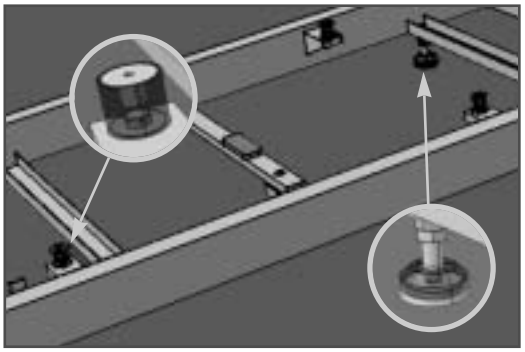
Heart Rate Course

The workout programs based on heart rate monitoring are the optimal way to exercise safely and efficiently within user's fitness capability. M990T series is equipped with built-in contact heart rate system and optional telemetry heart rate system, which measures user's heart rate exactly and then adjust the workout intensity according to target heart rate.



Shock Absorber System

Multiple shock absorption not only helps to protect the joints of knees or ankles from the repetitive impact of running but also offers natural feeling during exercising.



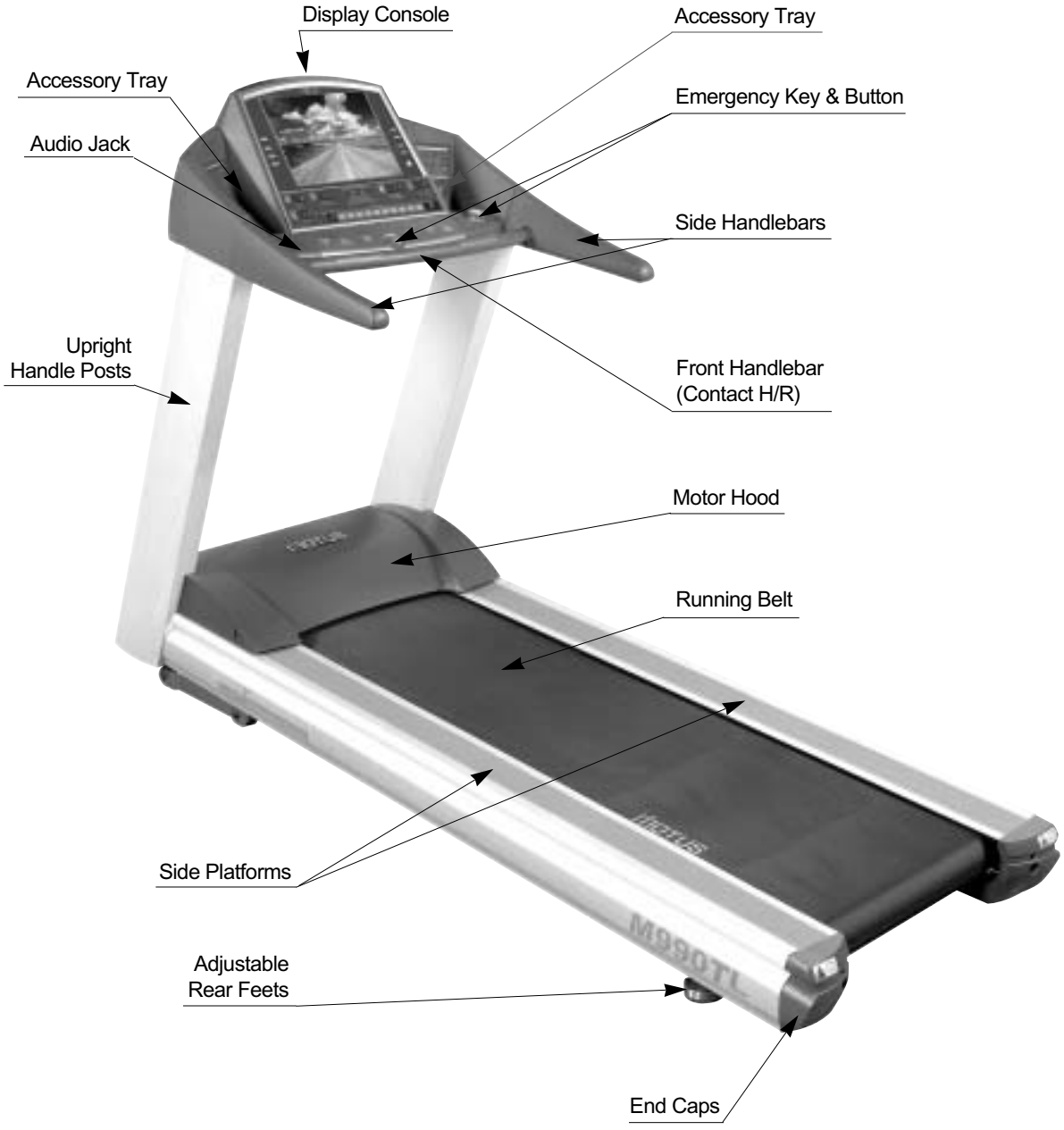
Convenient Manager Mode

Manager can set up maximum exercise time, maximum speed limit, measurement unit, pause time, lubrication amount per once, etc. Also manager can check accumulated distance, accumulated time, error log, etc, so it enables manager to maintain the product more effectively.

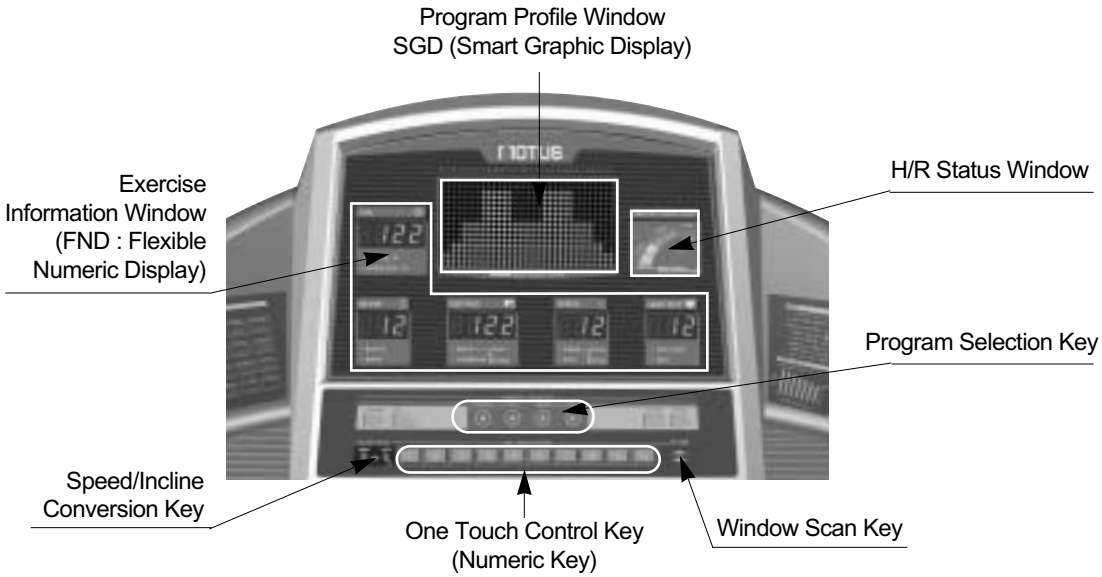
Entertainments Function

User can enjoy various music and image using TV, DVD, and VTR. To protect the screen from user's contact, transparent protective plate is installed on the outside of LCD screen. Also there are a spacious accessory tray, and head phone jack to enjoy a music using personal stereo like MP3 player.

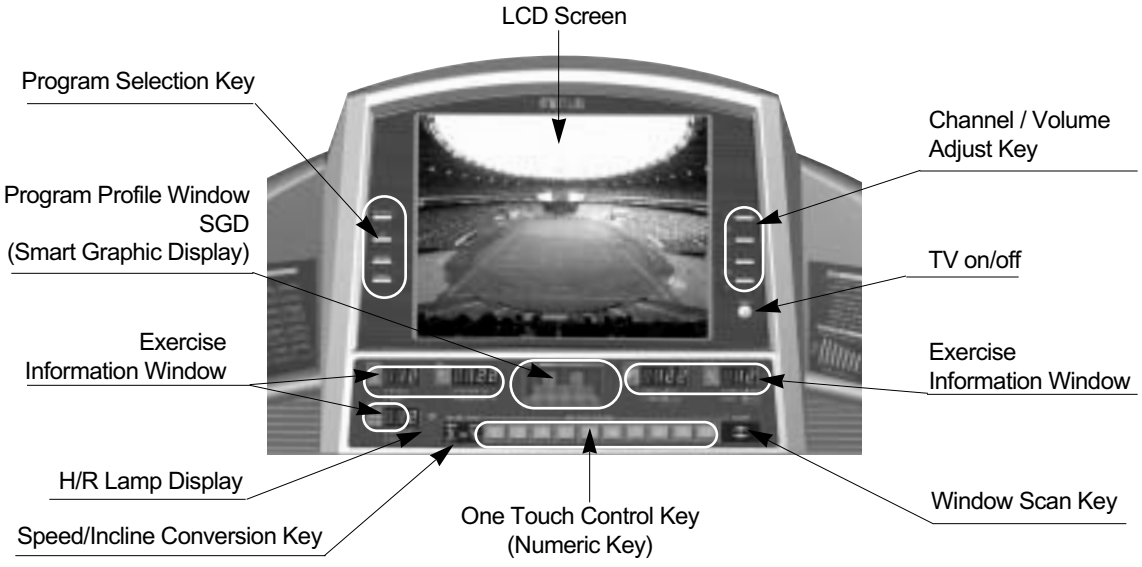
Name of Each Part



Display Console

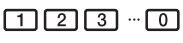


[M990T/ M995T]



[M990TL/ M995TL]

Name & Function of each control key

Name	Symbols	Function
START / STOP		Start, stop or end of workout
ENTER/PAUSE		Confirm entries of input data or pause during workout
SPEED ▽/△		Increase or decrease the speed Increase or decrease data values Select exercise profile
INCLINE ▽/△		Increase or decrease the incline of the treadmill Increase or decrease the target heart rate when using HRC program
SCAN (CONVERT)		Display another exercise information in same window
SPEED/INCLINE CONVERSION KEY		Determine that the numeric key should be assigned for one touch speed control or for one touch incline control. Default status is assigned for the speed control. The incline can be adjusted at a time by pressing specific numeric key after pressing this SPEED/INCLINE CONVERSION KEY. After a few seconds, the status returns to default for the speed control
ONE TOUCH CONTROL KEY (NUMERIC KEY)		Jump to the specific speed or incline at a time by pressing this key Input numeric data to set up values
PROGRAM		Preprogrammed exercise courses User can select one of these various exercise courses
HRC (Heart Rate Course)		HRC programs enable incline to be adjusted automatically according to user's actual heart rate and target heart rate
CUSTOM		User can edit the speed and incline for user's fitness capability.
MANUAL (GOAL)		Enable user to set target distance, time, or calorie for exercising

III. How to use

Operating procedure

Symbols	Description
	Check to ensure that the emergency key is in the right place
	If emergency button is pressed, release it by turning it toward arrow direction
	Plug in
	Turn on the main power switch front-bottom of treadmill
	Start exercise after selecting program

Note

- Do not press START/STOP button while treadmill is already in the middle of STOP.
- Do not press Emergency key/Emergency button while treadmill is already in the middle of STOP.
- Tie Emergency key's lanyard to your body before exercise.

Exercise Mode

Exercise mode	Number of program		Description
	M990T/TL	M995T/TL	
QUICK START	1	1	Start exercise immediately by pressing START / STOP button
PROGRAM	10	5	Choose one of various pre-programmed courses
CUSTOM	10	5	Edit speed / incline to be suitable user's fitness condition
HRC	5	2	Speed or Incline is adjusted to maintain user's heart rate within target heart rate
MANUAL OR GOAL	Distance / Calorie / Time		Choose one of distance, calorie or time as workout goal

Cool Down Exercise

If the final exercise speed is over 8km/h, Cool Down Exercise begins with the scroll message of "COOL DOWN..."

Note

- Cool Down Exercise continues for 3 minutes with 0% incline and 4km/h speed.
- If user wishes to finish exercise without a Cool Down session, touch the START / STOP key. Then treadmill will stop.
- No key is available except SCAN and START / STOP during Cool Down Exercise.

Quick Start

Quick Start let you by pass the setup procedure and start your workout immediately using default values.

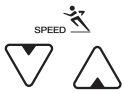
How to use quick start

1.

Touch Start / Stop button then treadmill starts to run.

▶ Treadmill starts after ● ○ ◎ sign on the screen.

Note - Treadmill starts at 1km/h of Speed and 0% of Incline.

2. 

Select a desired speed by using SPEED ▽/△ button.

▶ User can set up the speed more quickly with CONVERT and numeric key. When using numeric key, speed changes with the resolution of 1km/h from 1km/h to 10km/h.

Note - Default speed value is 1.0km/h.
- Speed can be controlled by the resolution of 0.1km/h with SPEED ▽/△ button.

3.

Set up a desired incline by using INCLINE ▽/△ button.

▶ User can set up the incline more quickly with SCAN and numeric key. When using numeric key, incline changes with the resolution of 1% from 1% to 10%.

Note - Incline range is from 0% to 15%, and can be controlled by changes with the resolution of 0.5% with INCLINE ▽/△ button.

4. To stop exercise, touch START/STOP button.

▶ Cool Down Exercise begins at the end stage of exercise profile. If you press 'START/STOP' button, exercise stops immediately without Cool Down Exercise.

5. Built-in heart rate measurement

▶ During exercise, user also can check heart rate with the contact heart rate sensor on the front handle grip.

Note - Make sure to grasp contact heart rate sensor firmly.

How to measure H/R with contact heart rate sensor

1. During exercise or treadmill stops, grasp contact heart rate sensor on the front handgrip with both hands.

▶ Grasp the center of right and left heart rate sensor at the same time.

Note

- The more your palms are in contact with the contact heart rate sensor plate, the more accurate data you can get.
- A result may be inaccurate due to a grip position, a contact surface, user or other surroundings.

2. On the side of the H/R display window, the ♥ lamp starts to blink.

▶ The blinking rate is the same as your heart rate.

3. After about 10 blinks, the result of your heart rate appears on the H/R display screen. is displayed

▶ Result is in proportion to user exercise intensity.

4. After then, user's H/R result is updated every 5 seconds and displayed on the H/R display screen.

Note

- Contact H/R sensor is less accurate than wireless polar heart rate sensor. For more accurate heart rate, wireless polar heart rate sensor is recommended.

Note

- When using wireless polar H/R, it is recommended to exercise close to display console for more accurate H/R sensing

Preprogrammed workout patterns

There are 5~10 preprogrammed workouts and 5~10 custom workouts which can be edited by club manager. User can select a workout suitable for user's condition while referring to workout patterns and name. In case of custom workouts, user can edit workout patterns in the custom mode but only can select a workout and exercise in the preprogrammed mode because customized workout pattern is appended to preprogrammed mode.

Mode	Program	Description
	Rhythmic1	To improve stamina of beginner. Low intensive program.
	Rhythmic2	To strengthen stamina of healthy user.
	Rhythmic3	To enhance fitness expert's physical strength. High intensive program. (Available at M900T)
	Dynamic1	To promote general physical strength of user.
	Dynamic2	To promote overweight user's general physical strength.
	Dynamic3	To enhance oxygenation of the blood and to exercise for marathon course. High intensity program. (Available at M900T)
	Interval1	To strengthen function of heart and lung.
	Interval2	More intensive program than Interval 1.
	Marathon	To improve entire stamina of user's and to exercise for marathon course.
	Fat burn	To manage user's weight adequately.

Note

- M990T, M990TL : All of 10 workouts are built-in.
- M995T, M995TL : 5 workouts are built-in.
  (Rhythmic I, Rhythmic II, Rhythmic III, Dynamic I, Dynamic II)

Preprogrammed Mode

1. Select preprogrammed workout

▶ If you press PROGRAM button, the message “SELECT WORKOUT ˆ / ˇ + ENTER” scrolls out on the screen.

2. Select workout program

▶ Touch ‘ENTER/PAUSE’ key after selecting one program with SPEED ▽/△’ and or numeric key. Next step is setup for exercise time. If you don’t press ‘ENTER/PAUSE’’ but ‘START/STOP’ key, exercise starts. Note - Default exercise time is 30 minutes.

Note - Default exercise time is 30 minutes.

3. Set up Exercise Time

▶ After the message “SET TIME” is displayed, the message “TM30” comes out to indicate exercise time is 30 minutes. Touch ‘ENTER/PAUSE’ key after setting up the exercise time with ‘SPEED ▽/△’ or numeric key. Next step is setup for weight. If you don’t press ‘ENTER/PAUSE’ but ‘START/STOP’ key, the striding belt starts moving.

Note
- Maximum exercise time can be set up in manager mode.
- Default weight value is 60kg.

4. Set up Weight

▶ After the message “SET WEIGHT” is displayed, the message “T60” comes out to indicate default user weight is 60kg. Touch ‘ENTER/PAUSE’ key after setting up user’s weight with ‘SPEED ▽/△’ or numeric key. If you don’t press ‘ENTER/PAUSE’ but ‘START/STOP’ key, exercise starts.

Note - When setting up weight with ‘SPEED ▽/△’ key, unit value is(the value changes with resolution of 1kg. If you keep pressing ‘SPEED ▽/△’ key for a while, weight value increase or decrease rapidly.

5. Start Exercise

▶ When the message “PRESS START” is displayed, touch the ‘START/STOP’ key and start exercise. During exercise, you can increase or decrease speed with ‘SPEED ▽/△’ key.

6. End of Exercise

▶ When the Exercise time is over, Cool Down Exercise begins only if final speed is over 8km/h. You can stop Cool Down Exercise by pressing ‘START/STOP’ key.

Custom Program

This function allows you to select exercise with the workout patterns you want according to your fitness ability. You can edit the speed and incline for each 5~10 programs.

1. Select Custom Mode

▶ If you press 'CUSTOM' button, the message "SELECT WORKOUT ˆ/ ˇ + ENTER" scrolls out on the screen

2. Select Program Number

▶ Touch 'ENTER/PAUSE' key after selecting program number you want to edit with 'SPEED ▽/△' or numeric key.

3. Set up Speed

▶ After the message "SET SPEED ˆ/ ˇ + ENTER" is displayed, speed set up screen appears and cursor blinks at first section in a red color. Touch 'ENTER/PAUSE' key after then setting up the speed with the 'SPEED ▽/△' or numeric key. After that, cursor moves automatically next section. (There are total 10 sections. Each section consists of 3 columns)

▶ After you complete the speed setup, the message "SET INCLINE ˆ/ ˇ + ENTER" is displayed on the screen.

4. Set up Incline

▶ After the message "SET INCLINE ˆ/ ˇ + ENTER" is displayed on the screen, incline set up screen appears and cursor blinks at first section in a red color. Touch 'ENTER/PAUSE' key after selecting the incline with the 'SPEED ▽/△' or numeric key. After that, the cursor moves automatically to next section. (There are total 10 sections. Each section consists of 3 columns)

▶ After you complete the incline setup, the message "ENTER TO SAVE WORKOUT" is displayed on the screen.

Note - 1 row in screen means 1%, and bottom line is 0%.

5. Save Program User Edited workout profile

▶ After the message "ENTER TO SAVE WORKOUT" is displayed on the screen, touch 'ENTER/PAUSE' to save the edited program.

Note - Saved program is located from the end of preprogrammed workout and can be used in the same way as preprogrammed workout.

HRC(Heart Rate Control) Mode

How to use Cardiovascular workout

▶ Calculate maximum heart rate and target heart rate
▶ Maximum heart rate (MHR) = 220 – AGE (YR),
▶ Target heart rate (THR) = MHR × 0 .8

Note - Contact H/R sensor is less accurate than wireless polar heart rate sensor. For H/R exercise, it is recommended to use wireless polar heart rate sensor.

1. Select HRC Mode

▶ When you press HRC button, the message “SELECT WORKOUT ˆ / ˇ + ENTER” is displayed on the screen.

2. Select ‘Cardiovascular’ workout

▶ Touch ‘ENTER/PAUSE’ button after selecting ‘CARDIOVASCUAR’ with SPEED ▽/△’ button.

3. Set up Time

▶ After the message “SET TIME ˆ / ˇ + ENTER” is displayed on the screen, the message “TM30” comes out to indicate default exercise time is 30 minutes. Touch ’ENTER/PAUSE’ button after setting up the exercise time with ‘SPEED ▽/△’ or numeric key. Next step is weight setup If you don’t press ‘ENTER/PAUSE’ but ‘START/STOP’ key, the striding belt starts moving.

Note - User can setup maximum exercise time in the manager mode

4. Set up Weight

▶ After the message “SET WEIGHT ˆ / ˇ + ENTER” is displayed on the screen, the message “WT060” comes out to indicate default user weight is 60kg. Touch ‘ENTER/PAUSE’ button after setting up user’s weight with ‘SPEED ▽/△’ or numeric key. Next step is age setup. If you don’t press ‘ENTER/PAUSE’ but ‘START/STOP’ key, the striding belt starts moving.

Note - When setting up the weight with ‘SPEED ▽/△’ button, the increment or decrement is done with the resolution of 1kg. If you keep pressing ‘SPEED ▽/△’, button for a while, weight value increase or decrease rapidly.

5. Set up Age

▶ After the message “SET AGE ˆ ˇ + ENTER” is displayed on the screen, the message “AG35” comes out to indicate the default user age is 35. Touch ‘ENTER/PAUSE’ button after setting up user’s age with ‘SPEED ▽/△’ or numeric key.

6. Set up Target Heart Rate

▶ After the message “SET HEARTRATE ˆ/ ˇ + ENTER”, heart rate value ♥148 will be displayed on the screen as a recommended THR for 35 years old user. If you want to change the recommended THR, touch ‘ENTER/PAUSE’ button after adjusting the THR with ‘SPEED ▽/△’ button.

Note

- Target heart rate depends on user’s fitness condition. Make sure to consult with doctor to set up more suitable target heart rate.

7. Start Exercise

▶ When the message “PRESS START” is displayed on the screen, Press ‘START/STOP’ key. After the striding belt starts moving, you can change the speed anytime during workout.

Note

- Treadmill operates at the speed of 1.0km/h. During a workout, the incline cannot be adjusted manually and INCLINE ▽/△ is used to adjust ‘Target Heart Rate’
- Whenever you touch INCLINE ▽/△ one time, the target heart rate is increased or decreased by the resolution of 1. The changed target heart rate is displays on the screen.

8. Start Cardiovascular Exercise

▶ After 3 minutes for warming up, “START HEART RATE EXERCISE” scrolls and Cardiovascular course starts.

9. Adjust Speed and THR

▶ You can adjust the speed and the Target Heart Rate anytime with ‘SPEED ▽/△’ key and ‘INCLINE ▽/△’ key respectively.

Note

- Your actual heart rate is detected every 5 seconds and the incline is automatically adjusted to maintain your heart rate at target heart rate.

- Actual heart rate ≤ Target heart rate - 11
  Incline increases by 2% in 15seconds.
- Target heart rate -10 ≤ Actual heart rate ≤ Target heart rate – 6
  Incline increases by 2% in 15seconds.
- Target heart rate - 5 ≤ Actual heart rate ≤ Target heart rate - 3
  Incline increases by 1% in 15 second
- Target heart rate - 2 ≤ Actual heart rate ≤ Target heart rate + 2
  No adjustment in incline
- Actual heart rate ≥ Target heart rate + 3
  Incline decreases by 2% in 15 seconds.

10. Stop exercise

▶ When exercise time is over or ’START/STOP’ key is touched, operation stops.

How to use Fat Burn workout

▶ Calculate maximum heart rate and target heart rate
▶ Maximum heart rate (MHR) = 220 – AGE (YR),
▶ Target heart rate (THR) = MHR × 0 .65

Note - Contact H/R sensor is less accurate than wireless polar heart rate sensor. For H/R exercise, it is recommended to use wireless polar heart rate sensor.

1. Select HRC Mode

▶ When you press HRC button, the message “SELECT WORKOUT ˆ/ ˇ + ENTER” is displayed on the screen.

2. Select ‘Fat Burn’ Exercise workout

▶ Touch ‘ENTER/PAUSE’ button after selecting 'Fat Burn' with 'SPEED ▽/△' button.

3. Set up Time

▶ After the message “SET TIME” is displayed on the screen, the message “TM30” comes out to indicate default exercise time is 30 minutes. Touch ‘ENTER/PAUSE’ button after setting up the exercise time with ‘SPEED ▽/△’ or numeric key. Next step is weight setup. you don’t press ‘ENTER/PAUSE’ but ‘START/STOP’ key, the striding belt starts moving.

Note - You can setup maximum exercise time in the manager mode.

4. Set up Weight

▶ After the message “SET WEIGHT ˆ/ ˇ + ENTER” is displayed on the screen, the message “WT60” comes out to indicate the default user weight is 60kg. Touch 'ENTER/PAUSE' button after setting up user’s weight with ‘SPEED ▽/△’ or numeric key. Next step is age setup. If you don’t press ‘ENTER/PAUSE’ but ‘START/STOP’ key, the striding belt starts moving.

Note - When setting up weight with 'STEED ▽/△' button, the increment or decrement is done with the resolution of 1kg. If you keep pressing ‘SPEED ▽/△’ button for a while, the weight value increase or decrease rapidly.

5. Set up Age

▶ After the message “SET AGE ˆ/ ˇ + ENTER” is displayed on the screen, the message “AG35” comes out to indicate the default user age is 35. Touch ‘ENTER/PAUSE’ button after setting up user’s age with ‘SPEED ▽/△’ or numeric key.

6. Set up Target Heart Rate

▶ After the message “SET HEARTRATE ˆ/ ˇ + ENTER”, heart rate value ♥148 will be displayed on the screen as a recommended THR for 35 years old user. If you want to change the recommended THR, touch ‘ENTER/PAUSE’ button after adjusting the THR with‘SPEED ▽/△’ button.

Note

- Target heart rate depends on user’s fitness condition. Make sure to consult with doctor to set up more suitable target heart rate.

7. Start exercise

▶ When the message “PRESS START” is displayed on the screen, Press ‘START/STOP’ key. After the striding belt starts moving, you can change the speed anytime during a workout.

Note

- Treadmill operates at the speed of 1.0km/h. During a workout, the incline cannot be adjusted manually and INCLINE ▽/△ button, is used to adjust ‘Target Heart Rate’
- Whenever you touch INCLINE ▽/△ one time, the target heart rate is increased or decreased by the resolution of 1. The changed target heart rate is displayed on the screen.

8. Cardiovascular Exercise

▶ After 3 minutes for warming up, “START HEART RATE EXERCISE” scrolls and Fat Burn course starts.

9. Adjust speed and THR

▶ If you needs, adjust the speed and Target Heart Rate anytime with ‘SPEED ▽/△’ key, and ‘INCLINE ▽/△’ key respectively.

Note

- Your actual heart rate is detected every 5 seconds and the incline is automatically adjusted to maintain your heart rate at target heart rate.

- Actual heart rate ≤ Target heart rate - 11
  Incline increases by 2% in 15seconds.
- Target heart rate -10 ≤ Actual heart rate ≤ Target heart rate – 6
  Incline increases by 2% in 15seconds.
- Target heart rate - 5 ≤ Actual heart rate ≤ Target heart rate - 3
  Incline increases by 1% in 15 seconds.
- Target heart rate - 2 ≤ Actual heart rate ≤ Target heart rate + 2
  No adjustment in incline
- Actual heart rate ≥ Target heart rate + 3
  Incline decreases by 2% in 15 seconds.

10. Stop exercise

▶ When exercise time is over or ‘START/STOP’ key is touched, it stops operation.

Manual or Goal Mode

Goal-oriented mode has 3 kinds of program, DISTANCE, CALORIES, and TIME. You can choose and exercise one of them. Each exercise ends automatically once each goal (DISTANCE, CALORIES, and TIME) is met.

(A) Distance Goal Exercise

1. Select Goal oriented Mode

▶ When you press MANUAL button, the message “SELECT WORKOUT ˆ/ ˇ + ENTER” is displayed on the screen.

2. Select Distance Goal Course

▶Touch ‘ENTER/PAUSE’ button after selecting ‘DISTANCE’ of goal oriented programs with ’SPEED ▽/△’ button. If you don’t press ’ENTER/PAUSE’ but ’START/STOP’ key, the striding belt starts moving.

3. Set up Distance Goal

▶After the message ”SET DISTANCE ˆ/ ˇ + ENTER” is displayed on the screen, the message “DT05” comes out to indicate default goal distance is 5km. Touch ‘ENTER/PAUSE’ after setting up the exercise distance with ‘SPEED ▽/△’ or numeric key. If you don’t press ‘ENTER/PAUSE’ but ‘START/STOP’ key, the striding belt starts moving.

4. Set up Weight

▶ After the message “SET WEIGHT ˆ/ ˇ + ENTER” is displayed on the screen, the message ‘WT060” comes out to indicate default user weight is 60kg. Touch ‘ENTER/PAUSE’ button after setting up user’s weight with ’SPEED ▽/△’ or numeric key. If you don’t press ‘ENTER/PAUSE’ but ‘START/STOP’ key, the treadmill starts to operate only with distance setting. The default weight, speed and incline is applied.

Note

- When setting up weight with ’SPEED ▽/△’ button, the value changes with the resolution of 1kg. If you keep pressing ’SPEED ▽/△’ button for a while, weight value increase or decrease rapidly.

5. Set up speed

▶ After the message “SET SPEED ˆ/ ˇ + ENTER” is displayed on the screen, the message P05” comes out to indicate default speed is 5km/h. Touch ‘ETER/PAUSE’ button after setting up the exercise speed with ‘SPEED ▽/△’ or numeric key. If you don’t press ‘ENTER/PAUSE’ but ‘START/STOP’ key, the treadmill starts to operate only with distance and weight setting. The default speed and incline is applied.

6. Set up Incline

▶After the message “SET INCLINE ˆ/ ˇ + ENTER” is displayed on the screen, the message “IN00” comes out to indicate default incline is 0%. Touch ‘ENTER/PAUSE’ button after setting up the incline with ‘SPEED ▽/△’ or numeric key. At this time, if you don’t press ‘ENTER/PAUSE’ key but ‘START/STOP’ key, the treadmill starts to operate without incline setting. (Other settings surch as distance, weight, and speed are duly applied)

7. Start exercise

▶When the message ‘PRESS START” is displayed on the screen, Press ‘START/STOP’ key and start exercise. You can adjust the speed and the incline anytime with ‘SPEED ▽/△’ and ’INCLINE ▽/△’ key, respectively.

8. Stop exercise

▶ When exercise time is over or distance goal is met, exercise ends.

(B) Calorie Goal Exercise

1. Select Goal oriented Mode

▶ When you press MANUAL(GOAL) button, the message “SELECT WORKOUT ˆ/ ˇ + ENTER” displays on the screen.

2. Select Calories Goal Course

▶ Touch ‘ENTER/PAUSE’ button after selecting ‘CALORIES’ of goal oriented programs with ‘SPEED ▽/△’ button. If you don’t press ‘ENTER/PAUSE’ but ‘START/STOP’ key, the striding belt starts moving.

3. Set up Calorie Goal

▶ After the message “SET CALORIE ˆ ˇ+ ENTER” is displayed on the screen, the message “Cal20” comes out to indicate default goal calorie is 200cal. Touch ‘ENTER/PAUSE’ button after setting up goal calorie with ‘SPEED ▽/△’ or numeric key. If you don’t press ‘ENTER/PAUSE’ but ‘START/STOP’ key, the striding belt starts moving.

4. Set up Weight

▶ After the message “SET WEIGHT ˆ/ ˇ + ENTER” is displayed on the screen, the message “WT60” comes out to indicate default user weight is 60kg. Touch ‘ENTER/PAUSE’ button after setting up user’s weight with ‘SPEED ▽/△’ or numeric key. If you don’t press ‘ENTER/PAUSE’ but ‘START/STOP’ key, the treadmill starts to operate only with calories setting. (The default weight, speed, and incline are duly applied)

Note

- When setting up weight with ’SPEED ▽/△’ button, the value changes with the resolution of 1kg. If you keep pressing weight value increase or decrease rapidly.

5. Set up Speed

▶ When the message “SET SPEED ˆ/ ˇ + ENTER” is displayed on the screen, the message “SP05” comes out to indicate default the speed is 5km/h. Touch ‘ENTER/PAUSE’ button after setting up the speed with ‘SPEED ▽/△’ or numeric key. If you don’t press ‘ENTER/PAUSE’ but ‘START/STOP’ key, the treadmill starts to operate only with the setting of the calories and weight. (The default speed and incline are duly applied)

6. Set up Incline

▶ When the message “SET INCLINE ˆ/ ˇ + ENTER” is displayed on the screen, the message “IN00” comes out to indicate default incline is 0%. Touch ‘ENTER/PAUSE’ button after setting up incline with ‘SPEED ▽/△’ or numeric key. If you don’t press ‘ENTER/PAUSE’ but ‘START/STOP’ key, the treadmill starts to operate without Incline setting. (Other settings such as calorie, weight, and speed are duly applied)

7. Start Exercise

▶ When the message “PRESS START” is displayed on the screen, Press ‘START/STOP’ key and start exercise. You can adjust the speed and the incline anytime with ‘SPEED ▽/△’ and ‘INCLINE ▽/△’ key, respectively.

8. Stop Exercise

▶ When exercise time is over or calories burned reaches goal calories, exercise ends.

(C) Time Goal Exercise

1. Select Goal oriented Mode

▶ When you press MANUAL button, the message “SLECT WORKOUT ˆ/ ˇ + ENTER” is displayed on the screen.

2. Select Time Goal Course

▶ Touch ‘ENTER/PAUSE’ button after selecting “TIME’’ of goal oriented programs with ‘SPEED ▽/△’ button. If you don’t press ‘ENTER/PAUSE’ but ‘START/STOP’ key, the striding belt starts moving.

3. Set up Time Goal

▶ After the message “SET TIME ▽/△ + ENTER” is displayed on the screen, the message “TM30” comes out to indicate default time goal is 30 minutes. Touch ‘ENTER/PAUSE’ after setting up the exercise goal time with ‘SPEED ▽/△’ or numeric key. If you don’t press ‘ENTER/PAUSE’ but ‘START/STOP’ key, the striding belt starts moving.

4. Set up Weight

▶ After the message “SET WEIGHT ˆ/ ˇ + ENTER” is displayed on the screen, the message “WT60” comes out to indicate default user weight is 60kg. Touch ‘ENTER/PAUSE’ button after setting up user’s weight with ‘SPEED ▽/△’ or numeric key. If you don’t press ‘ENTER/PAUSE’ but ‘START/STOP’ key, the treadmill starts to operate only with time setting. (The default weight, speed and incline are duly applied)

Note - When setting up weight with ‘SPEED ▽/△button, the value changes with the resolution of 1kg. If you keep pressing weight value increase or decrease rapidly.

5. Set up Speed

▶ When the message “SET SPEED ˆ/ ˇ + ENTER” is displayed on the screen, the message “SP05” comes out to indicate default speed is 5km/h. Touch ‘ENTER/PAUSE’ button after setting up speed with ‘SPEED ▽/△’ or numeric key. If you don’t press ‘ENTER/PAUSE’ but ‘START/STOP’ key, Exercise starts only with the setting of time and weight. (The default speed and incline are duly applied)

6. Set up Incline

▶ When the message “SET INCLINE ˆ/ ˇ + ENTER” is displayed on the screen, the message “IN00” comes out to indicate default incline is 0%. Touch ‘ENTER/PAUSE’ button after setting up incline with ‘SPEED ▽/△’ or numeric key. If you don’t press ‘ENTER/PAUSE’ but ‘START/STOP’ key, Exercise begins without incline setting. (Other settings such as calorie, weight, and speed are duly applied)

7. Start Exercise

▶ When the message “PRESS START” is displayed on the screen, Press ‘START/STOP’ key and start exercise. You can adjust the speed and incline any time with ‘SPEED ▽/△’ and ‘INCLINE ▽/△’ key, respectively.

8. Stop Exercise

▶ When exercise time is over, exercise ends.

Usage Digest

1. Quick Start

'START/STOP' →**'SPEED '▽/△'** →**'INCLINE ▽/△'** →**'START/STOP'**
(If the final speed is over 8km/h, exercise ends after Cool Down)

2. Preprogrammed Mode

'PROGRAM' → **Select program profile** →**'ENTER/PAUSE'** →**Set up time** →**'ENTER/PAUSE'** → **Set up weight** →**'ENTER/PAUSE'** →**'START/STOP'** →**Exercise starts** →**'SPEED or INCLINE ▽/△'** →**'START/STOP'** (If the final speed is over 8km/h, exercise stops after cool Down.)

3. Custom program

'CUSTOM' →**Select CUSTOM Mode** →**'ENTER/PAUSE'** → **Set up speed profile** (with 'SPEED ▽/△' → 'ENTER/PAUSE') → **Set up incline profile** (with 'SPEED ▽/△' → 'ENTER / PAUSE') → **Save edited program** (with 'ENTER/PAUSE')

4. HRC Mode

'HRC' →**Select HRC program** → **Set up time** →**'ENTER/PAUSE'** → **Set up weight** →**'ENTER/PAUSE'** →**Set up age** →**Set up heart rate** →**'START/STOP'** →**Exercise starts** →**Adjust speed** (with 'SPEED ▽/△') **and Target Heart Rate** (with 'INCLINE ▽/△') →**'START/STOP' (If the final speed is over 8km/h, exercise ends after Cool Down)**

Pause mode

When you want to stop the treadmill for a while, press 'ENTER/PAUSE' button during a workout. During pause mode, exercise information is kept.

How to use pause mode

1) When you press 'ENTER/PASUSE' key during exercise, pause mode is maintained for the pause time club manager preset in the manager mode. (Default time is 2minutes)
2) If you press 'ENTER/PAUSE' key within the pause time (2minutes) or you press 'START/STOP' key, exercise ends.
3) When you press 'ENTER/PAUSE' key for 5 seconds with the pause time, exercise restarts with 8 times beep.

Note - You can set up Pause time from 1 to 10 minutes in Manager Mode.

Manager Mode

Manager mode helps club manager to manage the treadmill more conveniently.

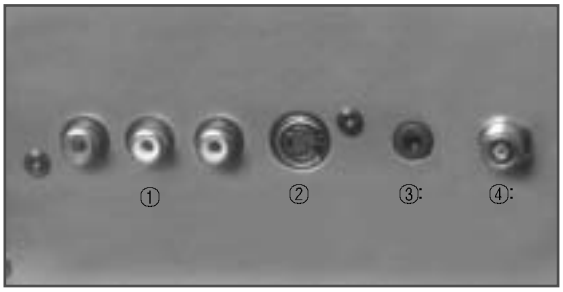
Item		Default Value	Description
WORKOUT DURATION		30 [Min]	Set up maximum exercise time from 10 to 99 minutes
MAXIMUM SPEED	M990T	21 [km/h]	Set up maximnum speed from 8 to 21km/h
	M995T	16 [km/h]	Set up maximnum speed from 8 to 16km/h
MEASUREMENT UNIT		0	Set up display unit of speed / distance 0 : km, 1: miles
PAUSE TIME		2 [Min]	Set up pause time from 1 to 10 minutes. During pause time, exercise information is not deleted, and displayed on the screen
TOTAL DISTANCE		ACTUAL ACCUMULATED DISTANCE	Display accumulated distance so far. Actual accumulated distance = display value X 10[km] If total accumulated distance is more than 100,000km, the 6th digit is displayed in the left window(FND) next to the display
TOTAL TIME		ACTUAL ACCUMULATED TIME	Display accumulated time so far. If total accumulated time is more than 10,000 hours, the 5th digit is displayed in the left window(FND) next to the display
LUBRICATION INTERVAL		30 [cc]	Set up lubrication amount that lubrication system automatically lubricates every lubrication interval. The amount range is from 10 to 60cc.
LUBRICATION AMOUNT		500[km]	Set up lubrication interval between 100 and 2,000 km. Lubrication interval = display value X 100[km]
ERROR LOG		-	Save and display error log.
SOFTWARE VERSION		VER.	Display treadmill's Software version.

How to use manager mode

1) Press the buttons in the order of 'SPEED ▽/△', 'INCLINE ▽/△', 'ENTER/PAUSE' on display console.
2) The message, "MANAGER MODE", is displayed on the screen, and manager mode is activated.
   If you press 'ENTER/PAUSE' key when "MANAGER MODE" message is displayed, you can escape from the manager mode.
3) Whenever user presses 'SPEED ▽/△' key, each items is displayed in turn as below.
   WORKOUT DURATION →MAXIMUM SPEED →MEASUREMENT UNIT →PAUSE TIME →
   TOTAL DISTANCE →TOTAL TIME →LUBRICATION AMOUNT →LUBRICATION INTERVAL →
   ERROR LOG →SOFTWARE VERSION →SYSTEM CONTROL →WORKOUT DURATION
4) After selecting an item and pressing 'ENTER/PAUSE' key, change the value as you want with 'SPEED ▽/△' key or numeric key. After completing setting up, press 'ENTER/PAUSE' key.
5) If you want to change another items, please repeat from procedure 3. If you want to get out of manager mode, press 'ENTER/PAUSE'

Note - Refer to Auto-Lubrication System as far as lubrication amount is concerned.

How to use TV media (M990TL, M995TL)



① : A/V terminal, 3 RCA jacks
(Red and white are for sound, yellow is for image)
② : S-VIDEO terminal
③ : Stereo jack
④ : 75-Ohm F-connector (coaxial connector)

1) During exercise, you can enjoy TV, DVD, VTR and etc. And you can control channel or volume with the buttons in the right side of LCD screen.

2) If you want to turn off the screen, press POWER ON/OFF button at the right-bottom side of the LCD screen.

3) You can enjoy the sound or music with headset that Motus provides. Headset jack is located in the left down on display console.

How to use MP3 player

To enjoy music from your personal MP3 player, please follow directions below.

1) Connect output signal from MP3 player to upper jack of the left down on display console.
2) Connect head phone Motus provided to lower jack to the left down on display console.

Ⅳ. Management of Product

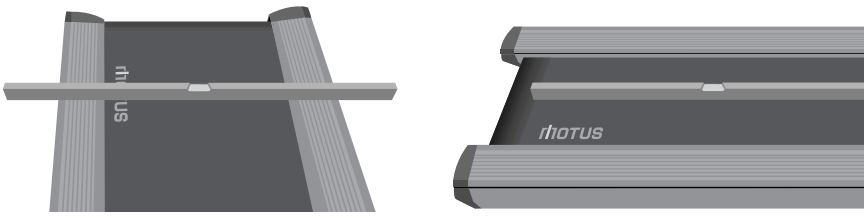
- When you move the machine, be careful not to collide with obstacles like wall.
- For long time use, keep the belt, deck and the area around the machine clean.

Level Adjustment

1. Check if the running surface of treadmill is even with the ground.

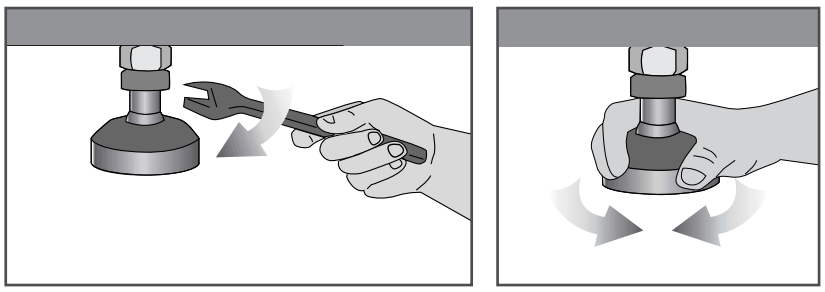
▶ A BUBBLE LEVEL can be used as shown in the figure.

Note - It may be impossible to adjust incase of bumpy ground condition



2. How to use Adjustable rear foot

▶ Loosen the nut on the top of adjustable rear foot by turning it clockwise. Once the nut is loosened, adjust it with hand to be leveled. After leveling, turn the nut counterclockwise and tighten it.



Note - Adjusting height must be done while rear side of treadmill is lifted up. Must not adjust more than 1/4 of entire adjustable rear foot's height.

Striding belt alignment

The belt is properly aligned at the factory before shipment. However, while delivering or exercising, the belt can be misaligned from the original center position. The correct alignment or striding belt is critical to the smooth operation of the treadmill.

▷ How to align

1. Balance the treadmill prior to any alignments if the striding surface of the treadmill is not level.

▶ The belt may move off center by using the treadmill on uneven surface.

2. Check belt' s alignment

▶ Check if the belt drifts off center or not while treadmill is operated with the speed of 5km/h for a few minutes.

▶ Keep in mind whether the belt is off center to which direction, left or right.

3. Take the following steps to align the striding belt on the treadmill.

3-1 Make sure the treadmill is OFF and the striding belt has completely stopped.
3-2 Find the right belt adjustment bolt in the rear end cap of the treadmill.
3-3 Make belt adjustments on right belt adjustment bolt using the 10 mm hex key wrench provided.
- If the belt is off center to the right, turn the adjusting bolt 1/4 turn clockwise, which moves the striding belt to the left.
- If the belt is off center to the left, turn the adjusting bolt 1/4 turn counterclockwise, which moves the striding belt to the right.

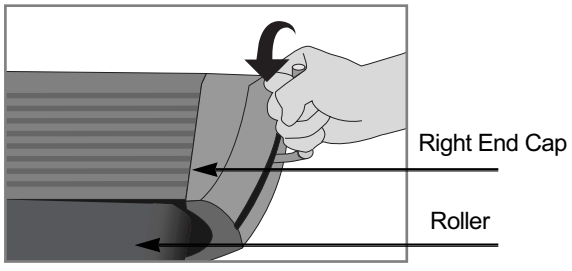
3-4 Turn ON the treadmill, press START/STOP, and then operate the treadmill with the speed of 5km/h.
3-5 Observe the striding belt for a few minutes. The belt should be centered on the deck.
3-6 If you need additional alignment, repeat steps 3-1 through 3-5 of this procedure until the belt is properly aligned.

Important

Do not turn the adjusting bolt more than 1/4 at a time. Over-tightening the bolt can damage the treadmill.

CAUTION

If you hear any chafing, the belt is not center-aligned or the belt appears to be getting damaged, stop the treadmill and contact authorized local dealer. Do not exceed one full turn of the adjusting bolts in either direction. If the belt does not appear properly centered after on full turn, contact Motus local dealer.

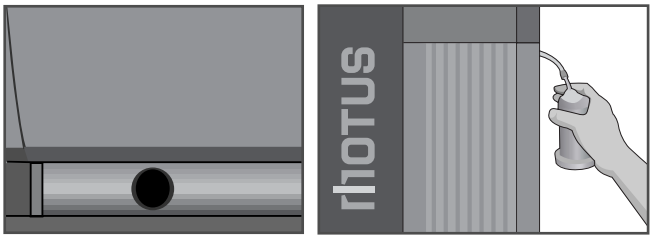


Instruction for the use of lubricating oil

1. After around 30 days from the shipment at factory, lubricate promptly according to the following instruction.
2. Lubricant prevents the belt and deck from being damaged by frictional heat, which extends life span of the deck and belt.
3. Lubricate more than twice a month. To judge proper lubrication timing, you can feel the friction intensity by pushing the striding belt backward using your feet while holding the front handle after turn OFF the treadmill.
4. Use the lubricant provided by Motus only.

How to inject lubricant manually

1. Fill the lubricator with the oil Motus provided.
2. The conduction hole for the lubrication is at the right corner on the front of the treadmill as shown in the picture.
3. Insert the pipe tip of the lubricant to the end through the conduction hole to spread out the lubricant on the center of the belt.
4. Inject the lubricant into the conduction hole by squeezing the lubricator about 20 times under the belt speed of 4km.
5. To spread out the lubricant all round on the belt, operate the treadmill for a few minutes.



How to manage automatic lubrication system (M990T, M990TL)

A certain amount of oil is lubricated automatically every lubrication interval which is preset at Manager mode. Default lubrication amount and lubrication interval are set up to 30cc and 500km, respectively, which can be set in Manager mode. Therefore, it is recommended that fitness club manger set up the lubrication amount and interval according to club condition.

A volume of lubricant tank is about 270cc, and if residual amount of oil is less than 20%, the warning SYMBOL is displayed on the screen with a beep. At that time, fill the tank as below instructions.

1) Turn OFF the treadmill and detach motor hood.
2) Open the cap of oil tank by turning it with hand.
3) Fill the empty tank fully with the oil provided by Motus. If oil is not filled full, automatic lubrication system doesn't work properly.
4) Close the cap of oil tank and put the motor hood in place.
5) Turn ON the treadmill. Message indicating oil lack will be still display on the screen with the beep.
6) To input "finishing oil-filling", press buttons in the order as below.

'INCLINE ▽' -> 'INCLINE △' -> 'SPEED ▽' -> 'SPEED △' -> 'ENTER'

Keep in mind that this step must be done after filling the tank fully.

7) The warning SYMBOL and beep disappears.)

Belt Tension Adjustment

Belt tension is properly adjusted before delivery. However, while exercising for a long time, the tension can be loose.

Note - it is very important to keep belt's tension constant for user's safety

▷ How to adjust

1) Turn on the treadmill, press START/STOP, and then operate the treadmill with the speed of 4km/h. Walk on the treadmill. Tightly grip the front handlebar and apply force with feet on the striding near the motor cover against the moving direction. If the belt slips, do steps from 2). If it does not slip, the tension is proper.
2) Stop the treadmill for a safety during adjustment and prepare 10mm wrench. Do not adjust tension while treadmill is in operation.

waming - If you adjust the belt tension when the treadmill is in operation, it is very dangerous because sleeve or a part of body may be caught in roller or belt.

3) There are belt adjustment bolts in the rear end cap of the treadmill, which enables to adjust belt tension. When turning this bolt, a position of roller moves back and forth. To move backward the roller, turn the bolt clockwise. To move forward the roller, turn the bolt counterclockwise.

4) Put 10mm wrench into the hole of the Right End Cap as below.
5) Turn the wrench 1/4 turn clockwise.
6) Put 10mm wrench into the hole of the Left End Cap as below.
7) Turn the wrench 1/4 turn clockwise.
8) Repeat steps 1) through 7) until the belt no longer slips. Do not exceed one full turn of the adjusting bolts in either direction. Over-tightening of the bolts may over stretch and damage the striding belt or roller bearings.

IV. Appendix

Specification

specification		M990TL	M990T	M995TL	M995T
Motor		AC 3.0HP Continuous duty			
Speed		0.1~21 Km/h, 0.1km/h Increment		0.1~16 Km/h, 0.1km/h Increment	
Incline		0~15%, 0.5% increase			
LCD Control Board	Screen	15" TFT LCD TV panel	×	15" TFT LCD TV panel	×
	Control Button	Adjust channel & volume LCD screen on / off	×	Adjust channel & volume LCD screen on / off	×
	Input Signal System	NTSC(domestic), PAL(international), SECAM(international)	×	NTSC(domestic), PAL(international), SECAM(international)	×
	Image Signal	Coaxial, RCA, S-VIDEO	×	Coaxial, RCA, S-VIDEO	×
16 x 32 Dot matrix Size		40.64 x 81.28(mm)	96 x 192(mm)	40.64 x 81.28(mm)	96 x 192(mm)
Exercise Information Display (7-segment, FND)		Time, Remaining time, Incline, Consumed calorie per hour, Distance, Calorie, Speed, PACE(min/km), Heart rate			
H/R Measurement System		O			
		Optional			
Exercise Programs	Programs	10		5	
	H/R	5		2	
	Custom	10		5	
	Manual	Distance, Calorie, Time			
Communication Port		RS232C			
Accessory Tray		O			
Headphone		O			
Emergency		Push Button Switch, Magnetic Pull			
HandleBar		Side & Front			
Handle for medical use		Optional			
Running Space		520 X 1,575 (mm)			
Lubrication		Automatic and Manual		Manual	
Power		Normal 220V AC, 50/60Hz			
Others		Touch-sensitive Switch (Built-in lamp), Aluminum Support & Non-slip, One touch control key (Speed & Incline)			
Manager Mode		Time, Speed Limit, Display Unit, Pause Time, Accumulated Time, Accumulated Distance, Lubrication Amount, Error Log, S/W Version, Lubrication Refill Alarm			
Maximum User Weight		185 (kg)			
Length x Width x Height		2161X900X1518 (mm)			
Weight		204 (kg)			

· Specifications can be changed without notice for product improvement or quality.

MOTUS 990SERIES

M990TL/M995TL

M990T/ M995T

■ Authorized Partner

13705 Cimarron Avenue, Gardena, CA 90249 USA

Tel: 310.515.1000 / Fax: 310.515.1151 www.motususa.com

This manual is property of Motus, it is prohibited to copy this manual without Motus' prior consent. Rev 1.0

MOTUS 990SERIES

USER MANUAL

M990T/M990TL
M995T/M995TL